

WHAT IS CLAIMED IS:

1. A method for providing automated directory assistance, comprising:
  - initiating a multi-stage directory assistance dialog 5 with a user;
  - prompting the user for a directory assistance utterance in accordance with a current stage of the multi-stage dialog;
  - recording a user utterance in response to the 10 prompt;
  - gathering one or more directory assistance search parameters from the user utterance;
  - determining whether a user directory assistance query may be completed based on gathered directory 15 assistance search parameters;
  - repeating the prompting operation until either the user directory assistance query may be completed or a determination that a user utterance satisfies an error condition; and
- 20 displaying gathered directory assistance search parameters on an operator terminal and forwarding one or more recorded user utterances to an operator for playback in response to a failure to obtain the directory assistance search parameters needed to complete the user 25 directory assistance query.

2. The method of Claim 1, further comprising:
  - playing for an operator a user utterance satisfying the error condition; and
  - playing for the operator a preceding utterance, the user utterance being received prior to the error utterance.
3. The method of Claim 1, further comprising determining when a user utterance satisfies an error condition based on whether the user utterance is discernable utilizing speech recognition.
4. The method of Claim 1, further comprising classifying received user utterances according to a confidence level including high confidence and one or more lesser confidences.
5. The method of Claim 4, further comprising populating the operator terminal with the directory assistance parameters gathered from the user utterances and classified with a high confidence level.
6. The method of Claim 1, further comprising highlighting one or more fields of the operator terminal populated with information provided by the caller in the utterances.
7. The method of Claim 1, further comprising combining two user utterances into one utterance for playback to the operator.

8. Software for providing directory assistance, the software embodied in computer readable media and when executed operable to:

- extract for use in a computer-assisted database
- 5 search one or more directory assistance search parameters from a plurality of user utterances; and
- forward for review by an operator the extracted
- directory assistance search parameters and one or more
- recorded user utterances in response to a failure to
- 10 resolve a user directory assistance query.

9. The software of Claim 8, further operable to:

determine when one of the user utterances initiates an error condition; and

- 15 transfer the caller to an operator upon occurrence of the error condition.

10. The software of Claim 9, further operable to:

play for the operator the user utterance initiating

- 20 the error condition; and
- play for the operator a preceding user utterance, the preceding user utterance being the last good user utterance received before the error user utterance.

25 11. The software of Claim 8, further operable to populate an operator computer screen with information extracted from one or more user utterances and classified with a high confidence level.

12. The software of Claim 11, further operable to highlight one or more fields in the operator computer screen requiring additional information from the user.

5 13. The software of Claim 8, further operable to ascertain whether results from a completed directory assistance query would be more efficiently communicated to the user via the operator or via an automated service.

10 14. The software of Claim 8, further operable to redirect the user to an operator for communication of the directory assistance query results when the results exceed a predefined query results maximum.

15. An automated directory assistance system,  
comprising:

an input/output port operable to communicate with a  
communication network;

5 a processor operably coupled to the input/output  
port;

a memory operably coupled to the processor; and

10 a program of instructions storable in the memory and  
executable by the processor, the program of instructions

operable to populate a computer terminal with directory  
assistance search parameters extracted from one or more  
user utterances and forward one or more recorded user  
utterances to an operator for playback in response to  
detection of an error condition preventing completion of

15 a user directory assistance query.

16. The system of Claim 15, further comprising the  
program of instructions operable to determine when a user  
utterance satisfies an error condition, transfer the user  
20 to an operator upon occurrence of the error condition,  
and play to the operator the error utterance and a  
preceding utterance.

17. The system of Claim 15, further comprising the  
25 program of instructions operable to populate the computer  
terminal with information extracted from the one or more  
user utterances and classified with a high confidence  
level.

18. The system of Claim 15, further comprising the program of instructions operable to redirect the user to an operator when a completed directory assistance query yields a number of results in excess of a predetermined 5 maximum.

19. The system of Claim 15, further comprising the program of instructions operable to redirect the user to an operator when a completed directory assistance query 10 yields no results.

20. The system of Claim 15, further comprising the program of instructions operable to conduct a disambiguation dialog with the user when a completed 15 directory assistance query yields a plurality of similar results.